

REMARKS

Applicants respectfully request further examination and reconsideration in view of the arguments set forth fully below. Claims 1-12 were previously pending in this application. Claims 1-12 have been rejected. By the above amendment, Claims 1 and 9 have been amended. Claims 1-12 are now pending in this application.

The amended Claims 1 and 9 clearly recite the subject matter of the present invention and further distinguish features of the present invention from the cited references. All of the amendments can be supported by the specification and figures of the present application as originally filed, and therefore there is no new matter is added therein.

Rejections Under 35 U.S.C. § 103

Within the Office Action, Claim 9 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,329,203 to Jeong (hereinafter "Jeong") in view of U.S. Patent No. 5,461,279 to Hasegawa (hereinafter "Hasegawa"). The Applicant respectfully disagrees.

As recognized within the Office Action, Jeong fails to teach the auxiliary anode attached to the outer surface of the glass plate, being parallel to the cathode and a circuit board. As further recognized within the Office Action, Hasegawa fails to teach a printed circuit board. Neither Jeong, Hasegawa nor their combination teach or make obvious that the anode, the cathode and the auxiliary anode are on a printed circuit board. The Applicant respectfully submits that the combination of Jeong and Hasegawa does not render the invention claimed in Claim 9 obvious.

The independent Claim 9 is directed to a structure of a field emission electrode adapted to be used for a cold cathode fluorescent flat lamp. The structure of a field emission electrode of Claim 9 comprises an anode, a cathode being parallel to said anode and an auxiliary anode disposed between said anode and said cathode and being parallel to said cathode, wherein said auxiliary anode is attached to an outer surface of a chamber of said cold cathode fluorescent flat lamp. It is further specified in Claim 9 that the anode, the cathode and the auxiliary anode are on a printed circuit board. As discussed above, Neither, Jeong, Hasegawa nor their combination teach or make obvious that the anode, the cathode and the auxiliary anode are on a printed circuit board. For at least these reasons, the independent Claim 9 is allowable over the teachings of Jeong, Hasegawa and their combination.

Within the Office Action, Claims 1, 4-6 and 8 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Jeong in view of Hasegawa and further in view of U.S. Patent No. 6,040,973 to Okamoto et al. (hereinafter "Okamoto"). The Applicant respectfully disagrees.

In contrast to the present claimed configuration, Jeong discloses two plates, an anode and a cathode on the inner surfaces of the plates and an auxiliary electrode on the inner side of the plate. As recognized within the Office Action, Jeong does not teach that the auxiliary electrode could be placed on the outer side of the plate for the disclosed configuration. In addition, Jeong does not teach that the auxiliary electrode could be parallel to the anode and the cathode. Moreover, Jeong's disclosure only teaches how to realize uniformly luminous pictures. It is to be noted that the present invention provides a cold cathode fluorescence flat lamp not only for improving illumination brightness uniformity, but also for solving the light vibration problems. Jeong does not teach any structure for preventing light vibration.

Okamoto discloses a field emission cold cathode device, which is driven by a positive voltage and a negative voltage for making an emission current constant. Okamoto does not teach any auxiliary electrode. Furthermore, Okamoto's configuration cannot achieve the purpose of preventing light vibration.

Hasegawa discloses a flat fluorescent lamp comprising two glass plates, two discharge electrodes and an auxiliary electrode. It is to be emphasized that (1) Hasegawa's two discharge electrodes and the auxiliary electrode are not installed in one printed circuit board, and (2) Hasegawa's auxiliary electrode 18 has no voltage and is used only for facilitating uniform luminance. It is well known that Hasegawa's auxiliary electrode 18 having no voltage is used in flat lamps for facilitating uniform luminance; however, the auxiliary anode of the present application is connected to a printed circuit board and has a voltage for attracting electrons emitted from the cathode to prevent light vibration [Present Specification, page 6, lines 9-12]. This feature is specified in the amended Claim 1 through the recitation of "a printed circuit board having said anode, said cathode and said auxiliary anode thereon."

Apparently, all the cited references cannot be provided for preventing light vibration. Furthermore, all the cited references have no auxiliary electrodes as the auxiliary anode of the present invention.

Based on at least the above reasons, the present invention has many features never shown, taught or suggested in any of the cited references, so that the present invention cannot be achieved even by combining the cited references. Furthermore, the three cited references are devoid of any suggestion or teaching that they could be combined, but hindsight is improperly relied on within the Office Action to arrive at the determination of obviousness. *In re Rijckaert*,

9 F. 3d 1531, 1533 (Fed. Cir. 1993). Therefore, the present application should be patentable over the cited references.

One skilled in the art cannot achieve the present invention through the teaching of Jeong even in view of Hasegawa and Okamoto. Therefore, the presently claimed invention is patentable over the cited references.

Even if considered proper, the combination of Jeong, Hasegawa and Okamoto does not teach the presently claimed invention. As discussed above and recognized within the Office Action, Jeong fails to teach the auxiliary anode attached to the outer surface of the glass plate, being parallel to the cathode and a printed circuit board. As also discussed above and recognized within the Office Action, Hasegawa fails to teach a printed circuit board. Okamoto does not teach a printed circuit board having the anode, the cathode and the auxiliary anode thereon. Accordingly, neither Jeong, Hasegawa, Okamoto nor their combination teach a printed circuit board having the anode, the cathode and the auxiliary anode thereon.

The independent Claim 1 is directed to a cold cathod fluorescent flat lamp. The cold cathode fluorescent flat lamp of Claim 1 comprises an enclosure chamber sealed by two reciprocally parallel plates of glass and containing a gas therein, an anode and a cathode disposed in said enclosure chamber, wherein said cathode is parallel to said anode, an auxiliary anode disposed between said anode and said cathode and being parallel to said cathode, wherein said auxiliary anode is attached to an outer surface of either said plates of glass and a printed circuit board having said anode, said cathode and said auxiliary anode thereon. As discussed above, neither Jeong, Hasegawa, Okamoto nor their combination teach a printed circuit board having said anode, said cathode and said auxiliary anode thereon. For at least these reasons, the independent Claim 1 is allowable over the teachings of Jeong, Hasegawa, Okamoto and their combination.

Claims 4-6 and 8 are all dependent on the independent Claim 1. As discussed above, the independent Claim 1 is allowable over the teachings of Jeong, Hasegawa, Okamoto and their combination. Accordingly, the dependent Claims 4-6 and 8 are all also allowable as being dependent on an allowable base claim.

Within the Office Action, Claims 2, 3, 7 and 10-12 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Jeong in view of Hasegawa, Okamoto and U.S. Patent No. 4,767,965 to Yamano (hereinafter "Yamano"). The Applicant respectfully disagrees.

Claims 2, 3 and 7 are all dependent on the independent Claim 1. As discussed above, the independent Claim 1 is allowable over the teachings of Jeong, Hasegawa, Okamoto and their combination. Accordingly, the dependent Claims 2, 3 and 7 are all also allowable as being dependent on an allowable base claim.

Claims 10-12 are all dependent on the independent Claim 9. As discussed above, the independent Claim 9 is allowable over the teachings of Jeong, Hasegawa and their combination. Accordingly, the dependent Claims 10-12 are all also allowable as being dependent on an allowable base claim.

For the reasons given above, Applicants respectfully submit that the claims are in a condition for allowance, and allowance at an early date would be appreciated. Should the Examiner have any questions or comments, they are encouraged to call the undersigned at (408) 530-9700 to discuss the same so that any outstanding issues can be expeditiously resolved.

Respectfully submitted,
HAVERSTOCK & OWENS LLP

Dated: November 10, 2003

By: Jonathan O. Owens
Jonathan O. Owens
Reg. No. 37,902
Attorneys for Applicants